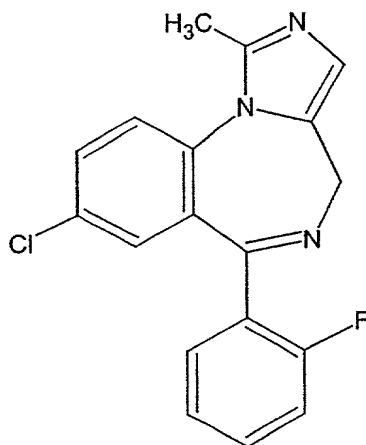
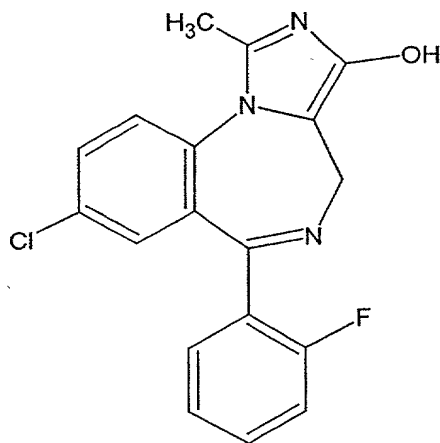


**CYP3A4**



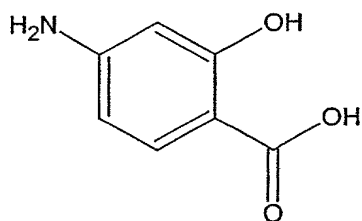
MDZ (Midazolam)



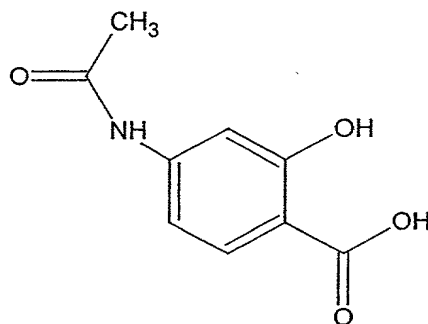
1-OH-MDZ (1-Hydroxymidazolam)

**Fig. 1**

**NAT1**



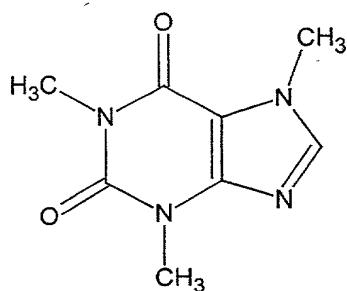
p-ASA (p-aminosalicylic acid)



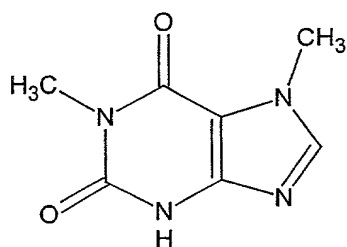
Acetyl-pASA (acetyl-p-aminosalicylic acid)

**Fig. 2**

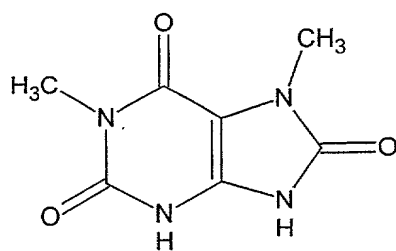
**CYP1A2**



Caffeine (1,3,7-trimethylxanthine)



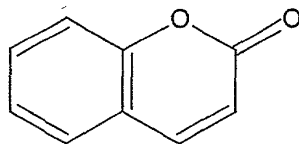
1,7-DMX (1,7-dimethylxanthine)



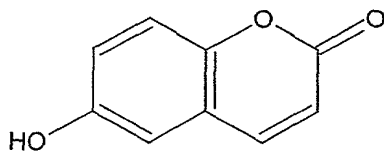
1,7-DMU (1,7-dimethyluracil)

**Fig. 3**

**CYP2A6**



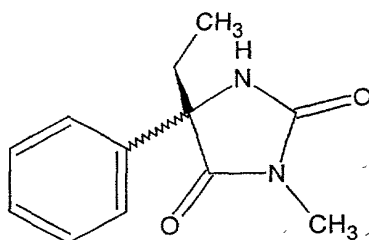
Coumarin



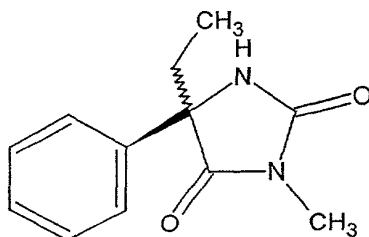
7-Hydroxycoumarin

**Fig. 4**

## CYP2C19



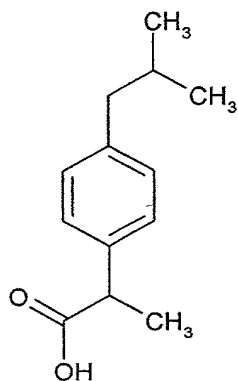
R-(-)-Mephénytoin



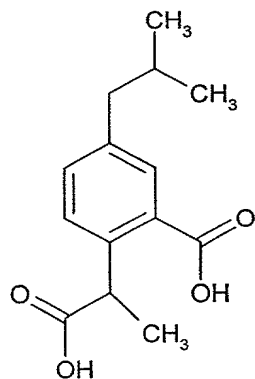
S-(+)-Mephénytoin

**Fig. 5**

**CYP2C9**



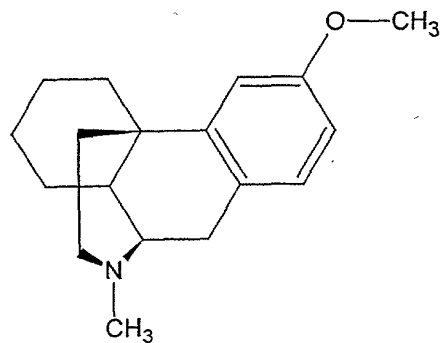
(s) -Ibuprofen



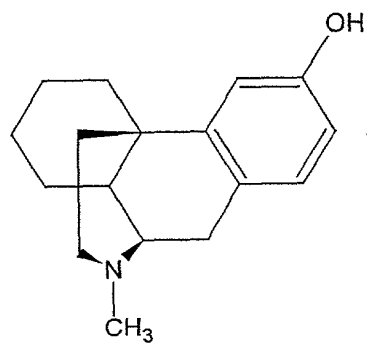
2-carboxvibuprofen

**Fig. 6**

**CYP2D6**



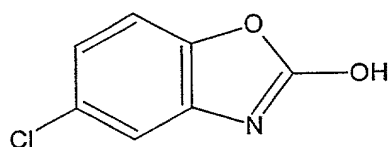
Dextromethorphan



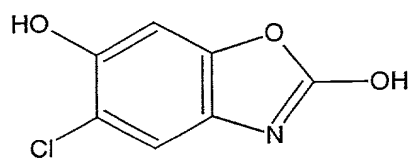
Dextrorphan

**Fig. 7**

**CYP2E1**



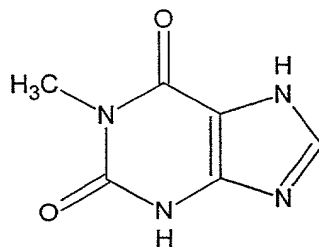
Clorzoxazone



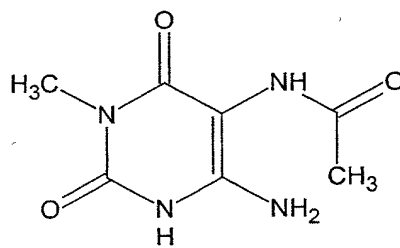
6-Hydroxychlorzoxazone



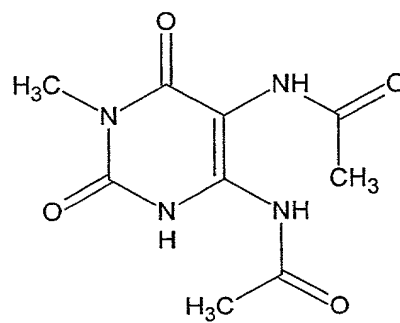
**NAT2**



1X (1-methylxanthine)



AAMU (5-acetamido-6-amino-methyluracil)



AFMU (5-acetamido-6-formylamino-methyluracil)

**Fig. 9**

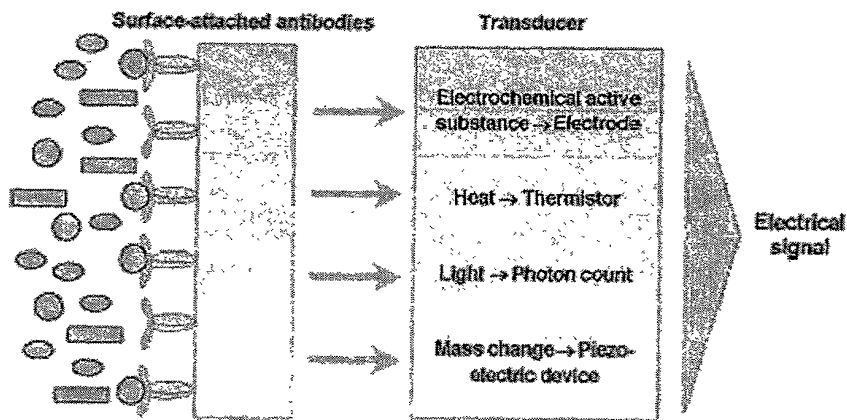


Fig. 10

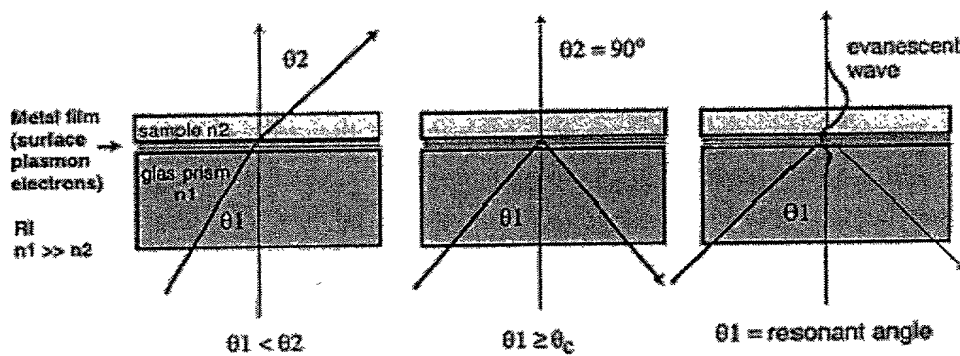


Fig. 11

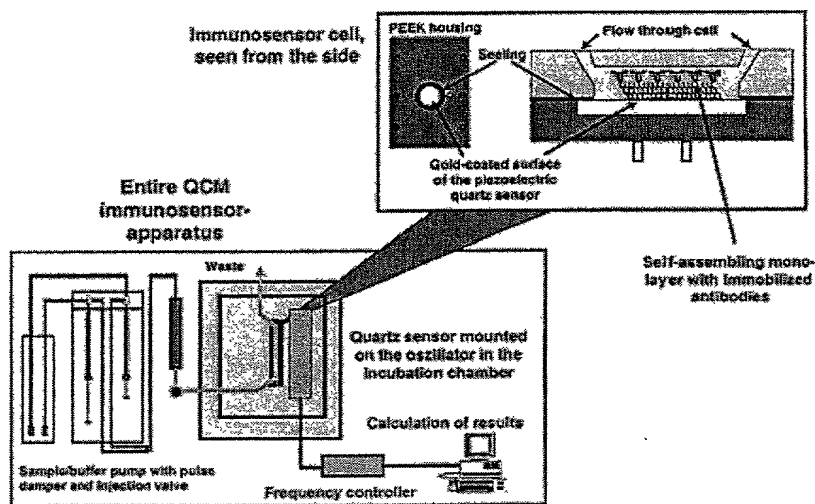
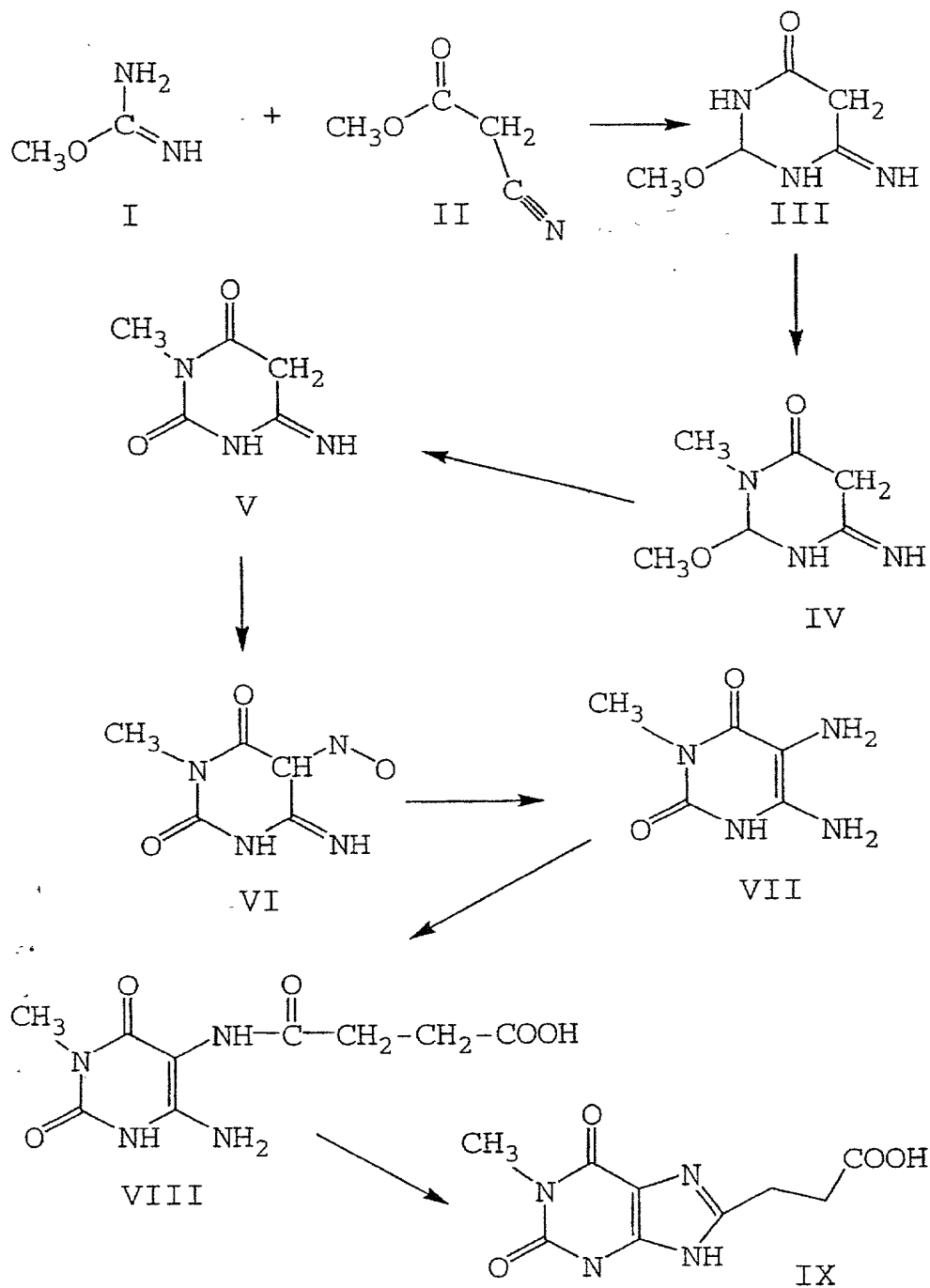


Fig. 12

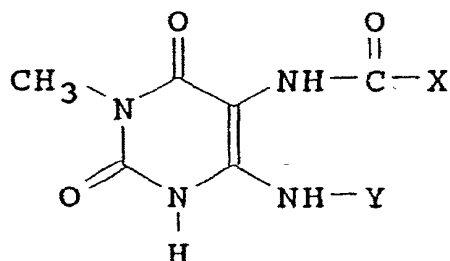


AAMU-hemisuccinic acid

1 methyl xanthine-8-propionic acid

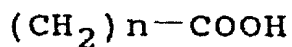
Fig. 13

Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or  
 AFMU (5-acetamino-6-formylamino-3-methyluracil)

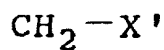
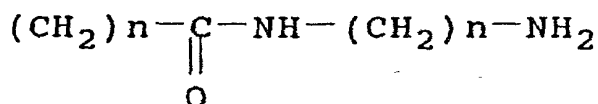
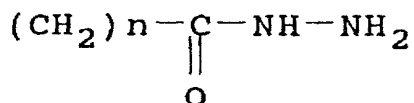


Where Y is  
 H or  $\begin{array}{c} \text{C-H} \\ || \\ \text{O} \end{array}$

X



where n = 2, 3 or 4



where X' is I, Br, or Cl

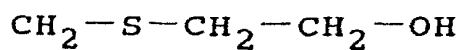
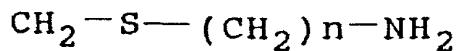
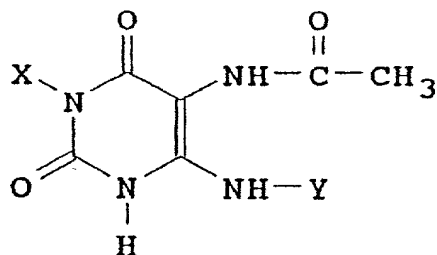
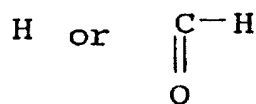


Fig. 14

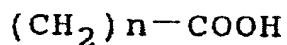
Derivatives of AAMU (5-acetamino-6-amino-3-methyluracil) or  
AFMU (5-acetamino-6-formylamino-3-methyluracil)



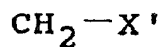
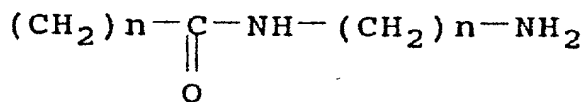
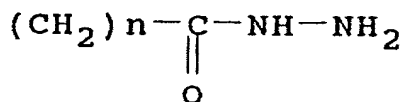
Where Y is



X



where n = 2, 3 or 4



where X' is I, Br, or Cl

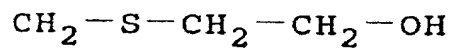
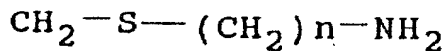
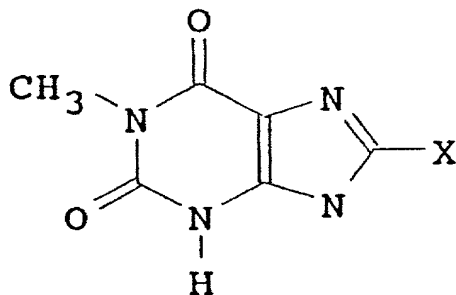
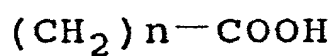


Fig. 15

Derivatives of 1X (methylxanthine)



X



where n = 2, 3 or 4

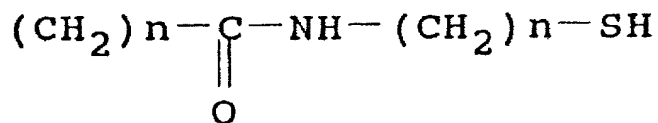
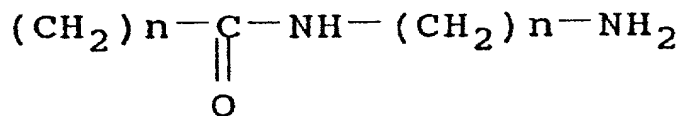
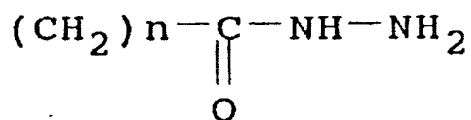
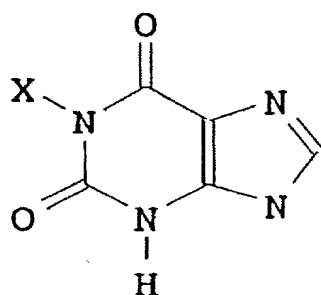


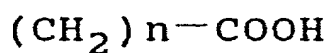
Fig. 16



Derivatives of 1X (methylxanthine)



X



where  $n = 2, 3$  or  $4$

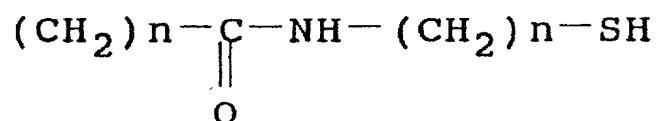
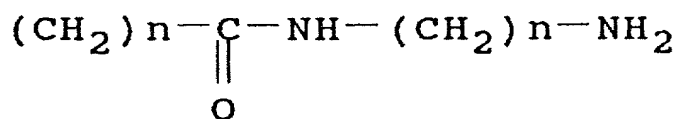
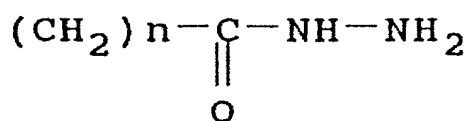


Fig. 17

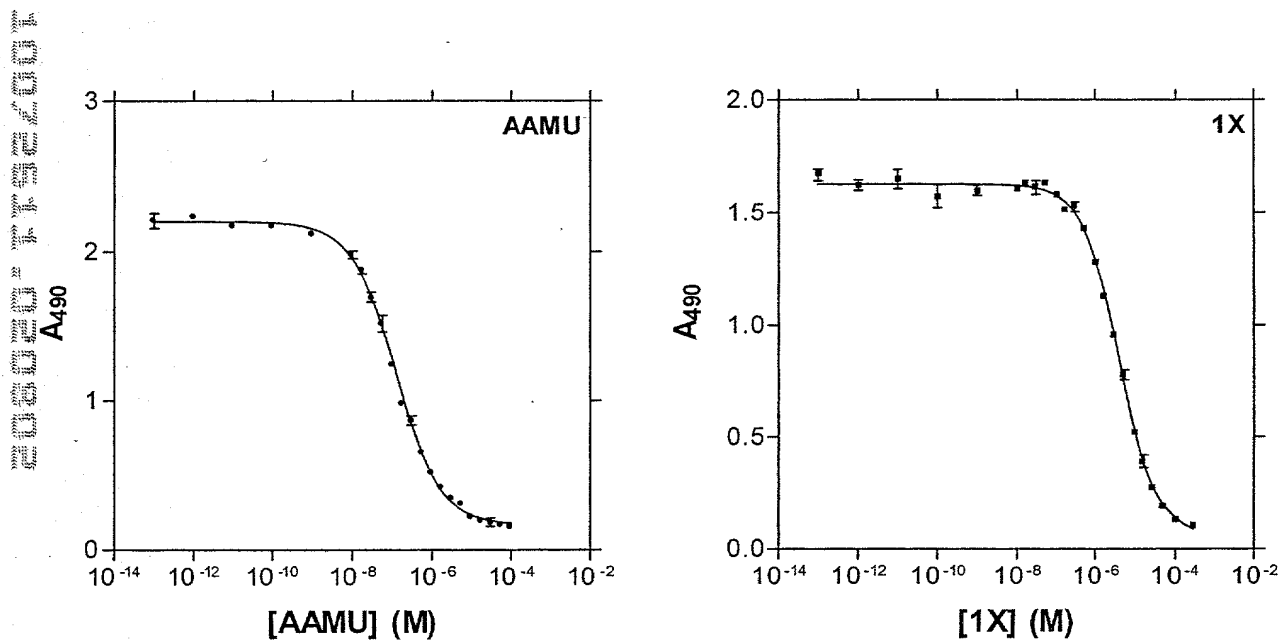


Fig. 18

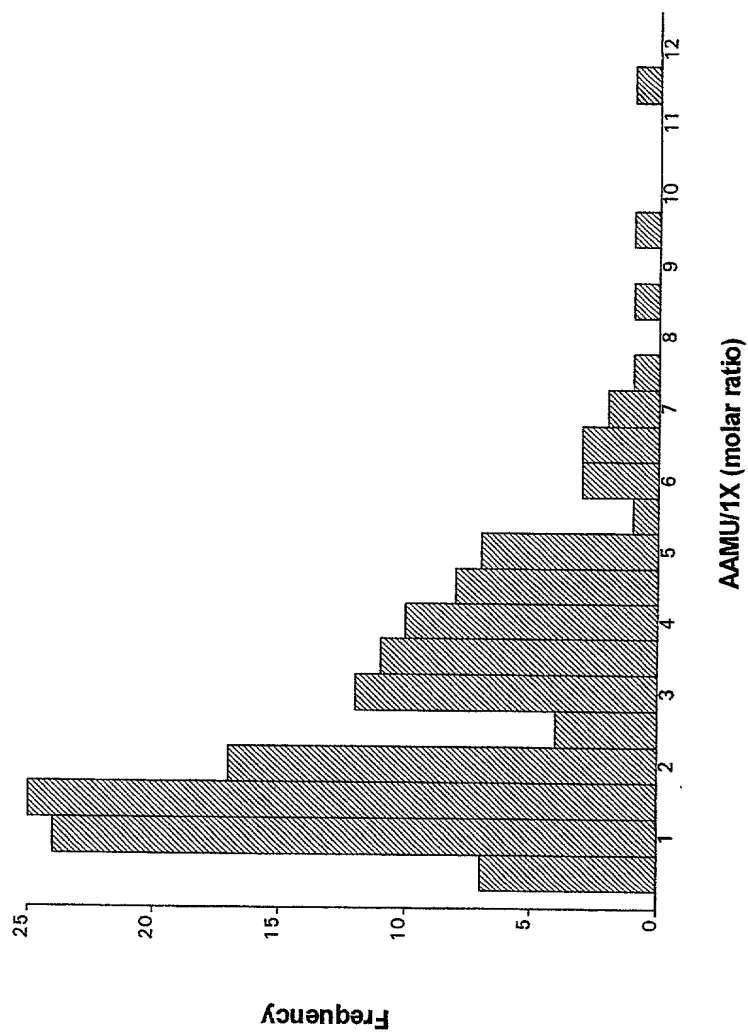


Fig. 19

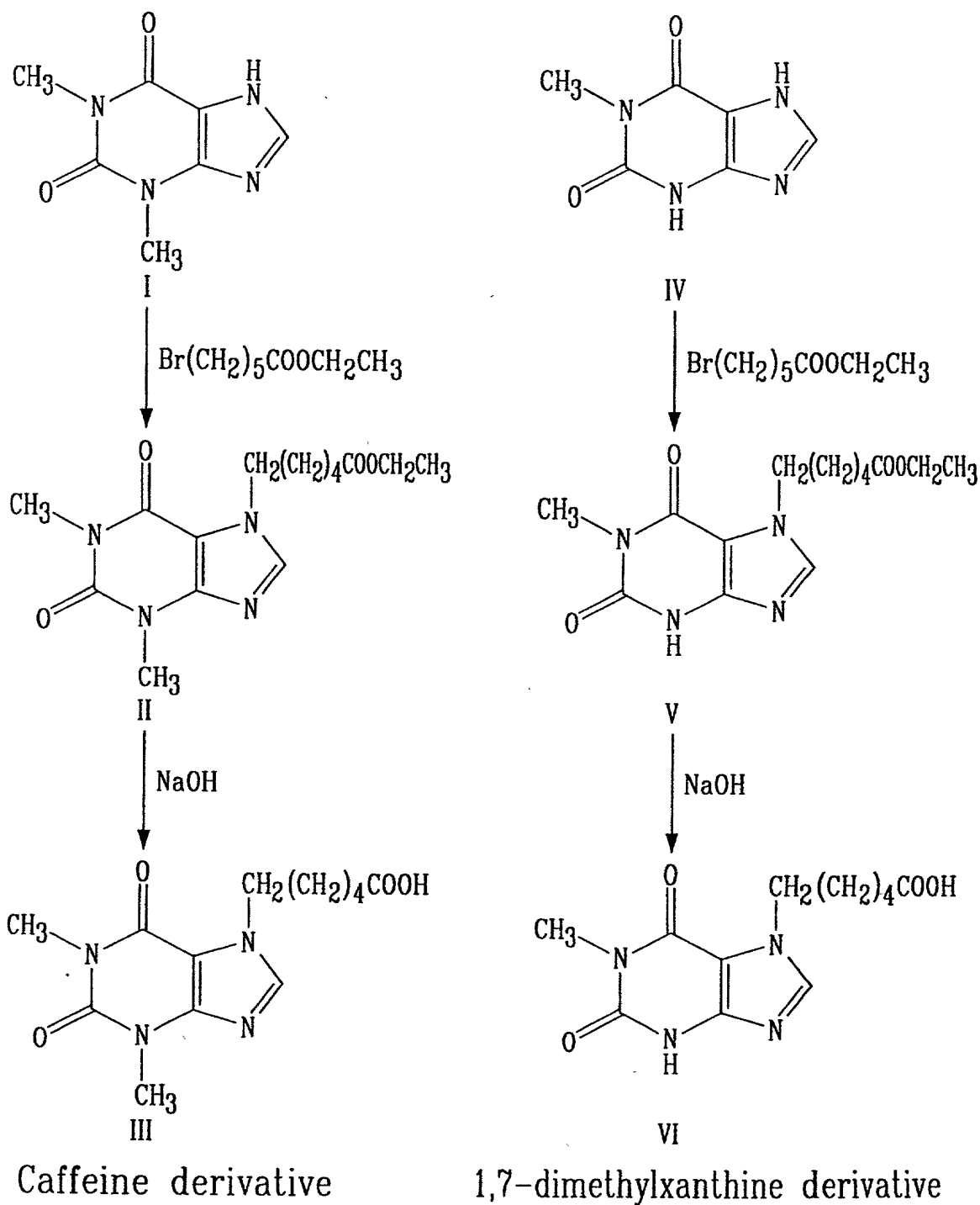
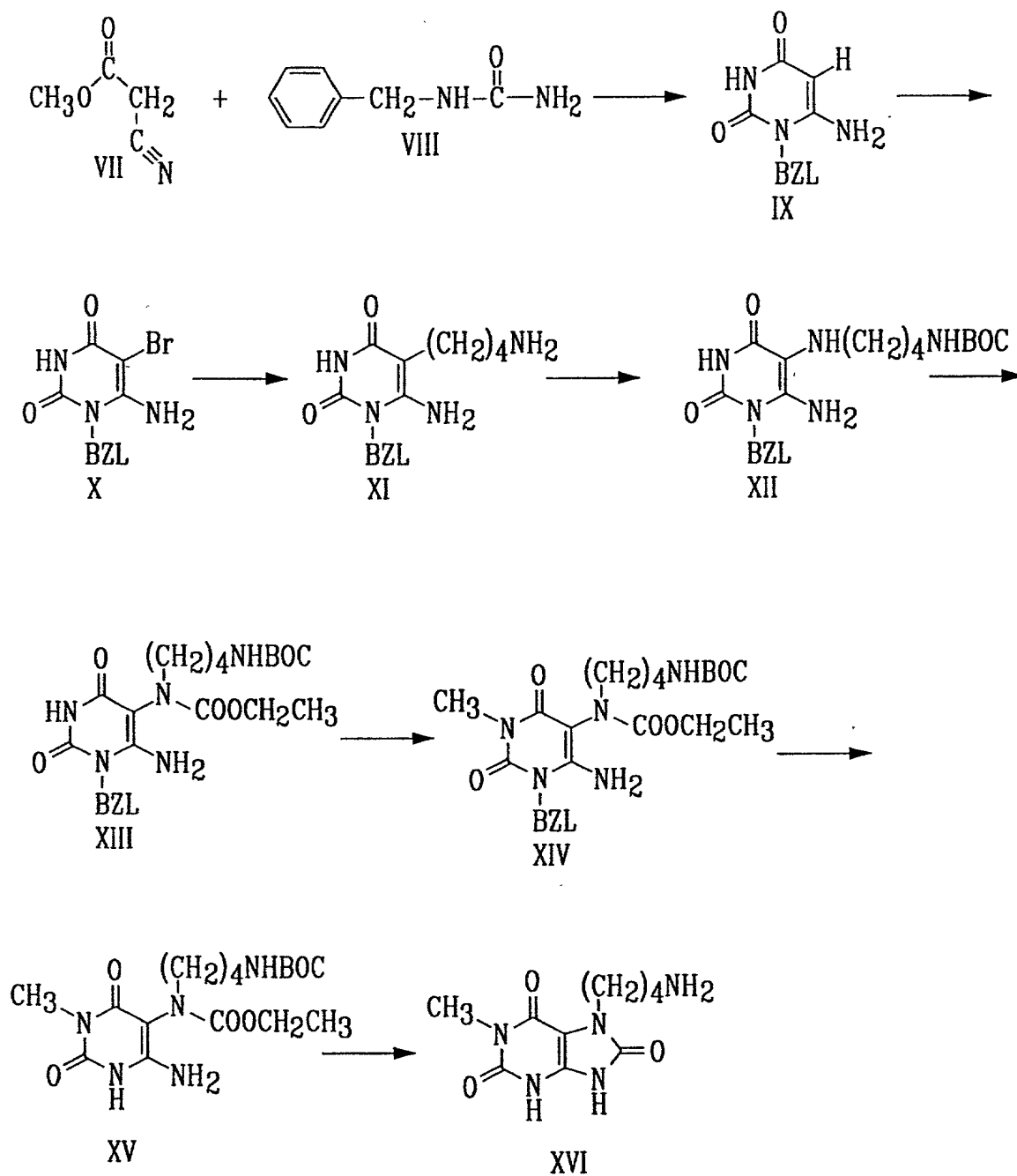


Fig. 20



1,7-dimethyluric acid derivative

Fig. 21

	1	2	3	4	5	6	7	8	9	10	11	12
A	Blk	STD8	STD16	S1	S9	S5	S1	S9	S5	Blk	STD8	STD16
B	STD1	STD9	STD17	S2	S10	S6	S2	S10	S6	STD1	STD9	STD17
C	STD2	STD10	STD18	S3	S11	S7	S3	S11	S7	STD2	STD10	STD18
D	STD3	STD11	STD19	S4	S12	S8	S4	S12	S8	STD3	STD11	STD19
E	STD4	STD12	STD20	S5	S1	S9	S5	S1	S9	STD4	STD12	STD20
F	STD5	STD13	STD21	S6	S2	S10	S6	S2	S10	STD5	STD13	STD21
G	STD6	STD14	STD22	S7	S3	S11	S7	S3	S11	STD6	STD14	STD22
H	STD7	STD15	STD23	S8	S4	S12	S8	S4	S12	STD7	STD15	STD23

Fig. 22

# 96-WELL MICROARRAY PLATE

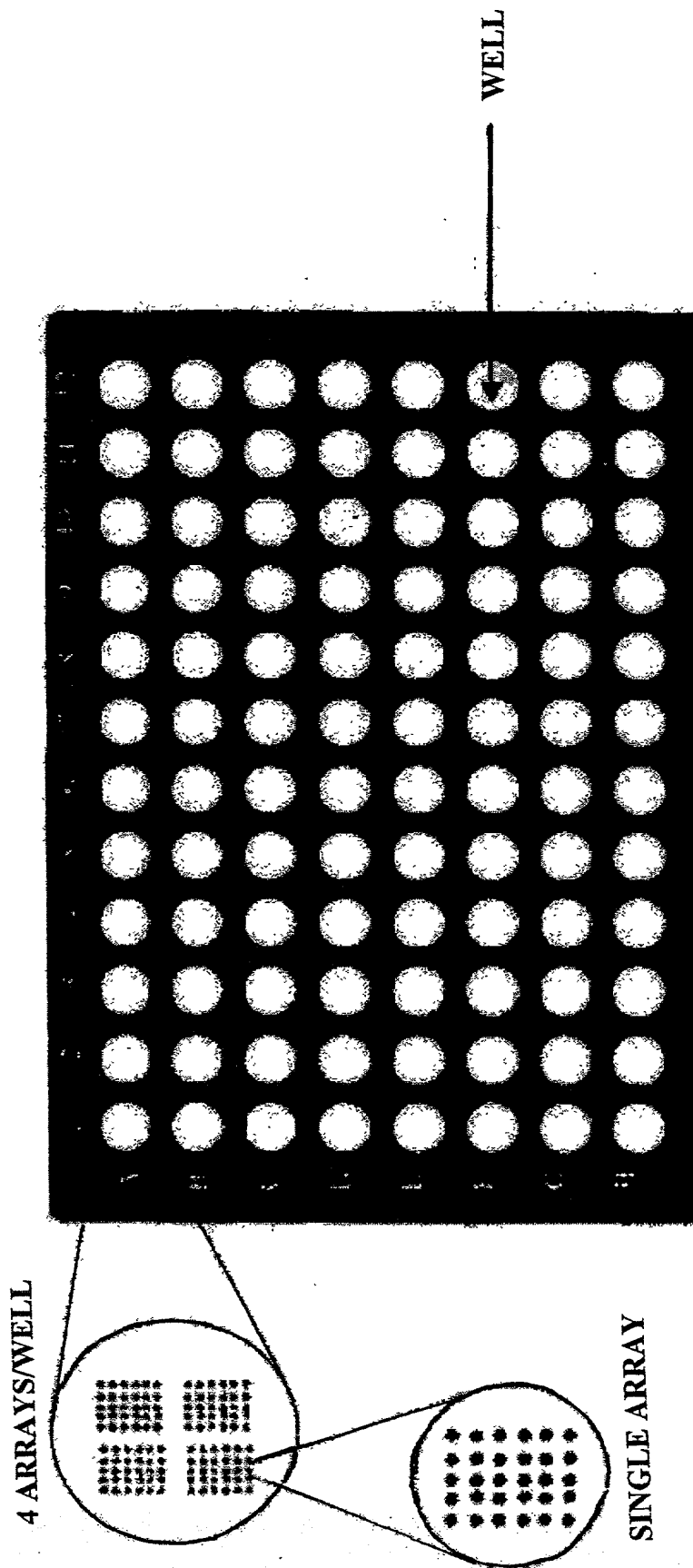


Fig. 23

ANTIGEN KEY:

1.	BIOTINYLATED BSA MARKER
2-6.	BUFFER BLANKS
7.	NAT2: AAMU
8.	BIOTINYLATED BSA MARKER
9.	NAT2: 1X
10.	NAT1: pASA
11.	NAT1: ACETYL-pASA
12.	CYP1A2: CAFFEINE
13.	BIOTINYLATED BSA MARKER
14.	CYP1A2: 1,7-DMX
15.	CYP1A2: 1,7-DMU
16.	CYP2A6: COMARIN
17.	CYP2A6: 7-HYDROXYCOUMARIN
18.	CYP2C19: R-(-)-MEPHENYTOIN
19.	BIOTINYLATED BSA MARKER
20.	CYP2C19: S-(+)-MEPHENYTOIN
21.	CYP2C9: DICLOFENAC
22.	CYP2C9: 4-HYDROXYDICLOFENAC
23.	CYP2D6: DEXTROMETHORPHAN
24.	CYP2D6: DEXTROPHAN
25.	BIOTINYLATED BSA MARKER
26.	CYP2E1: CHLORZOXAZONE
27.	CYP2E1: 6-HYDROXYCHLORZOXAZONE
28.	CYP3A4: MIDAZOLAM
29.	CYP3A4: 1-HYDROXYMIDAZOLAM
30.	BUFFER BLANK
31-36.	BIOTINYLATED BSA MARKER

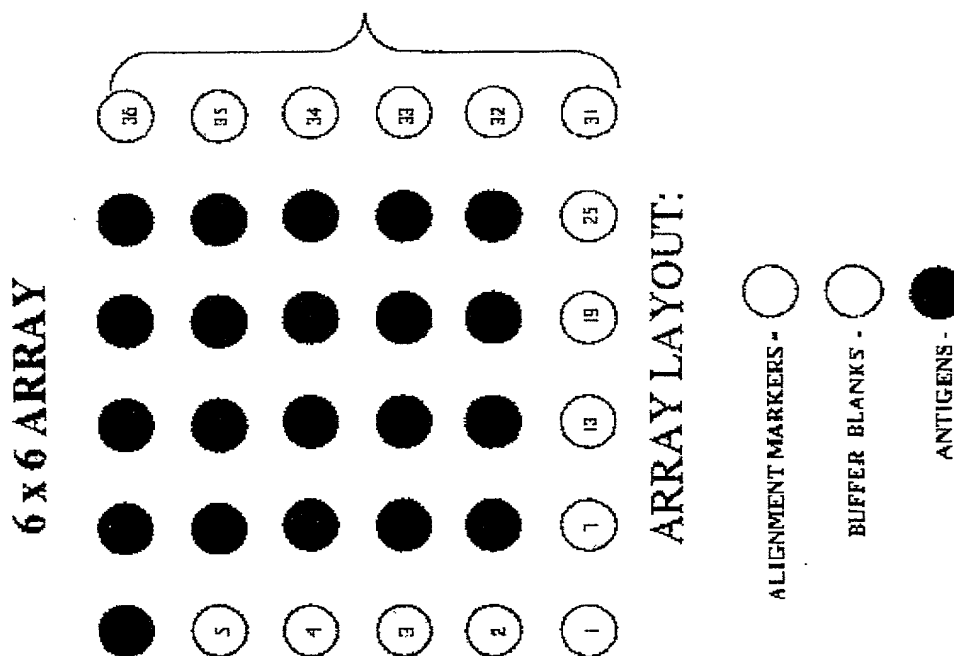


Fig. 24



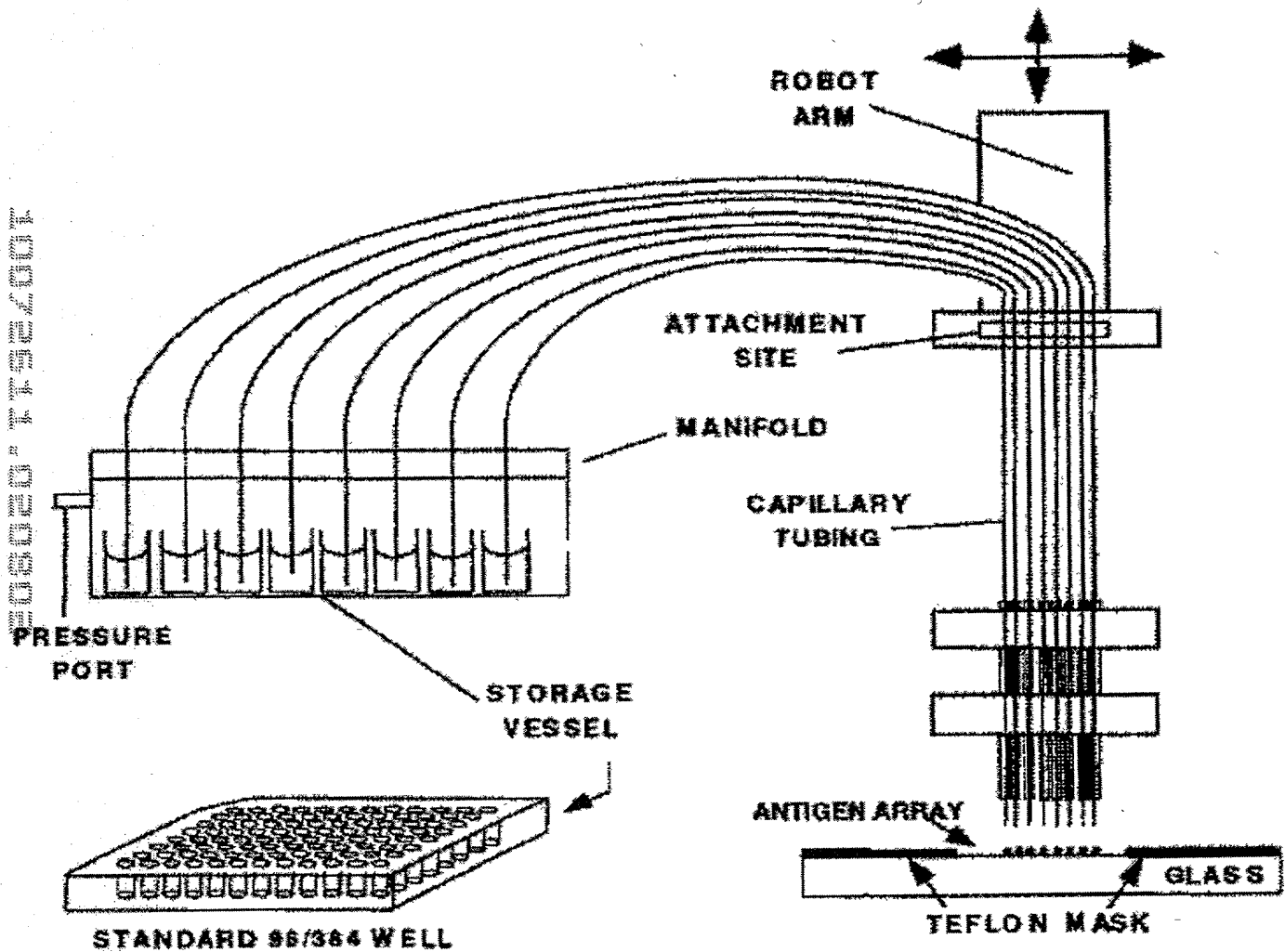


Fig. 25

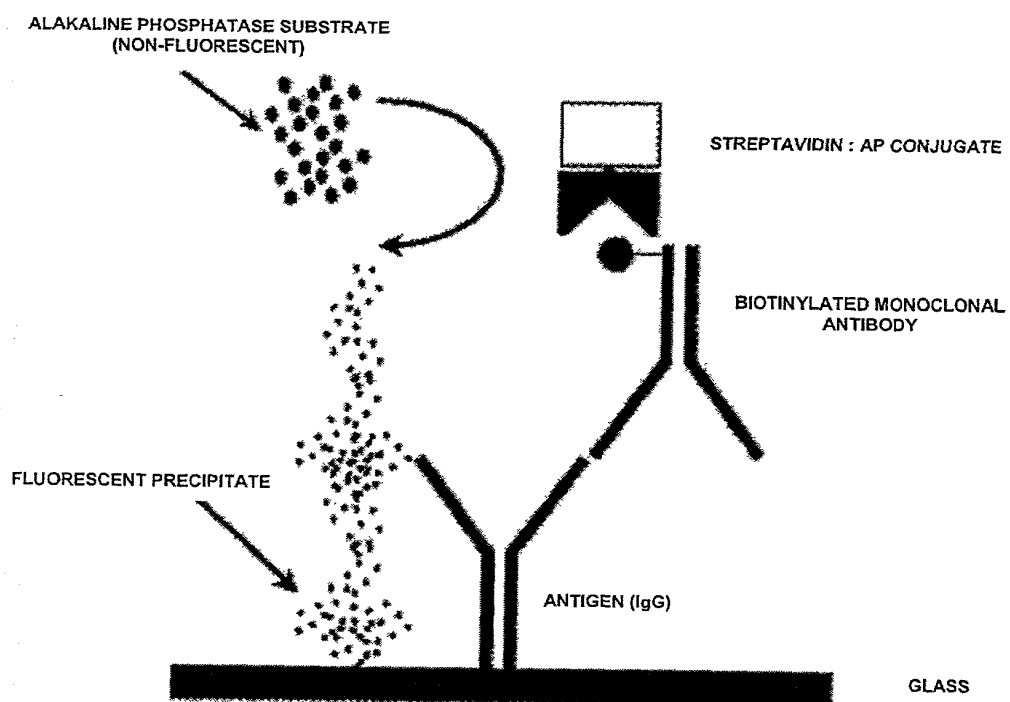


Fig. 26

## Rapid Immunassay (Dipstick)

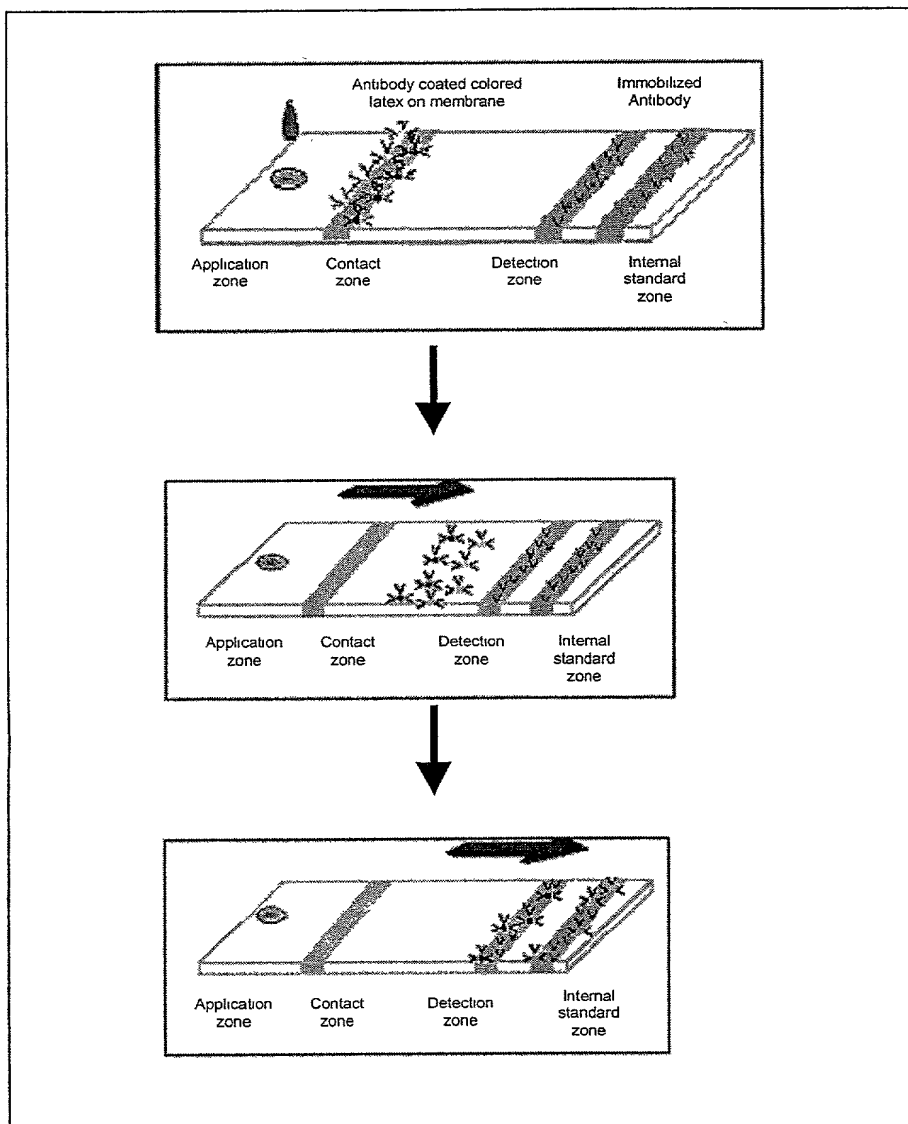


Fig. 27

## PCR-ELISA

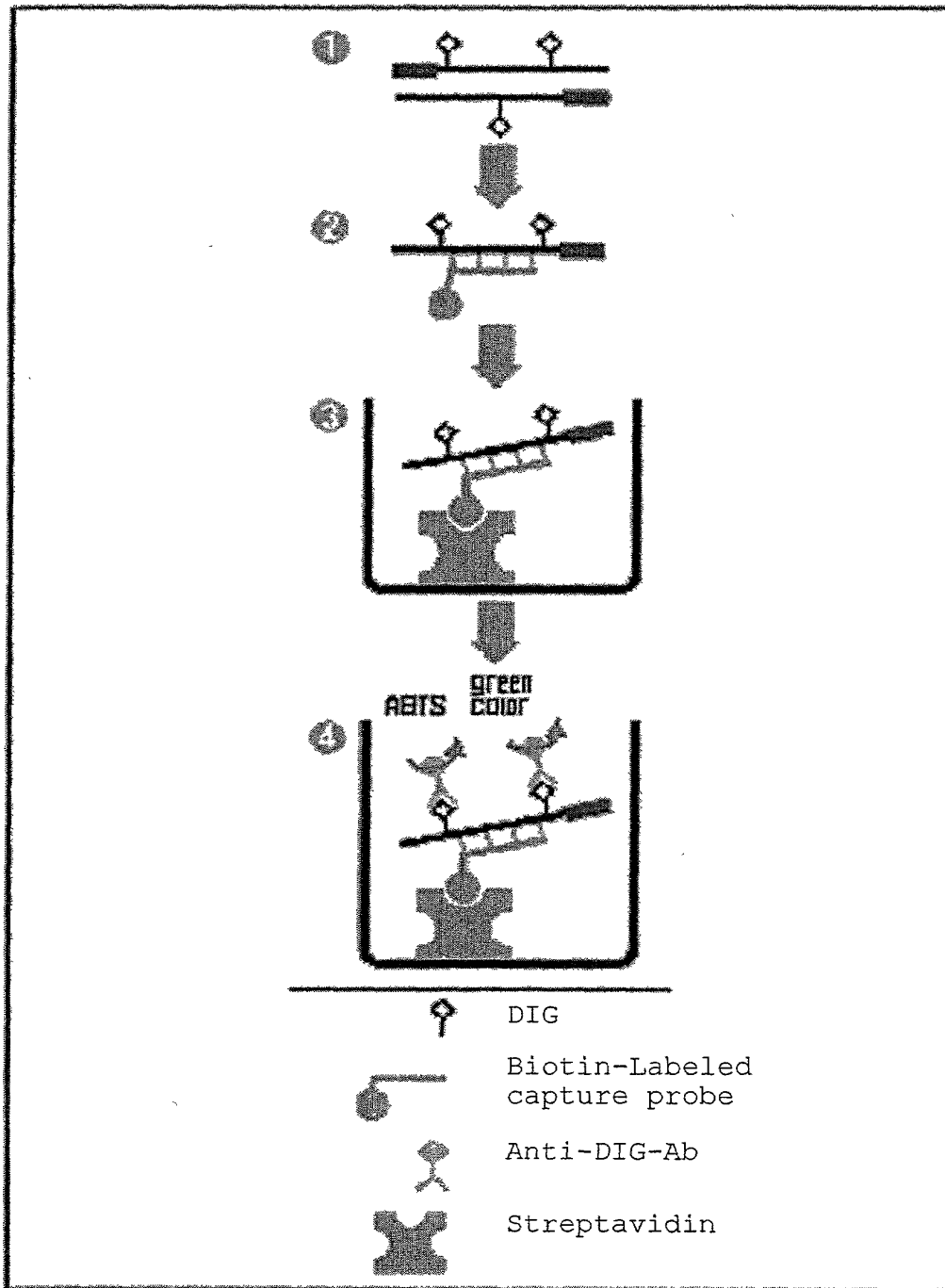


Fig. 28

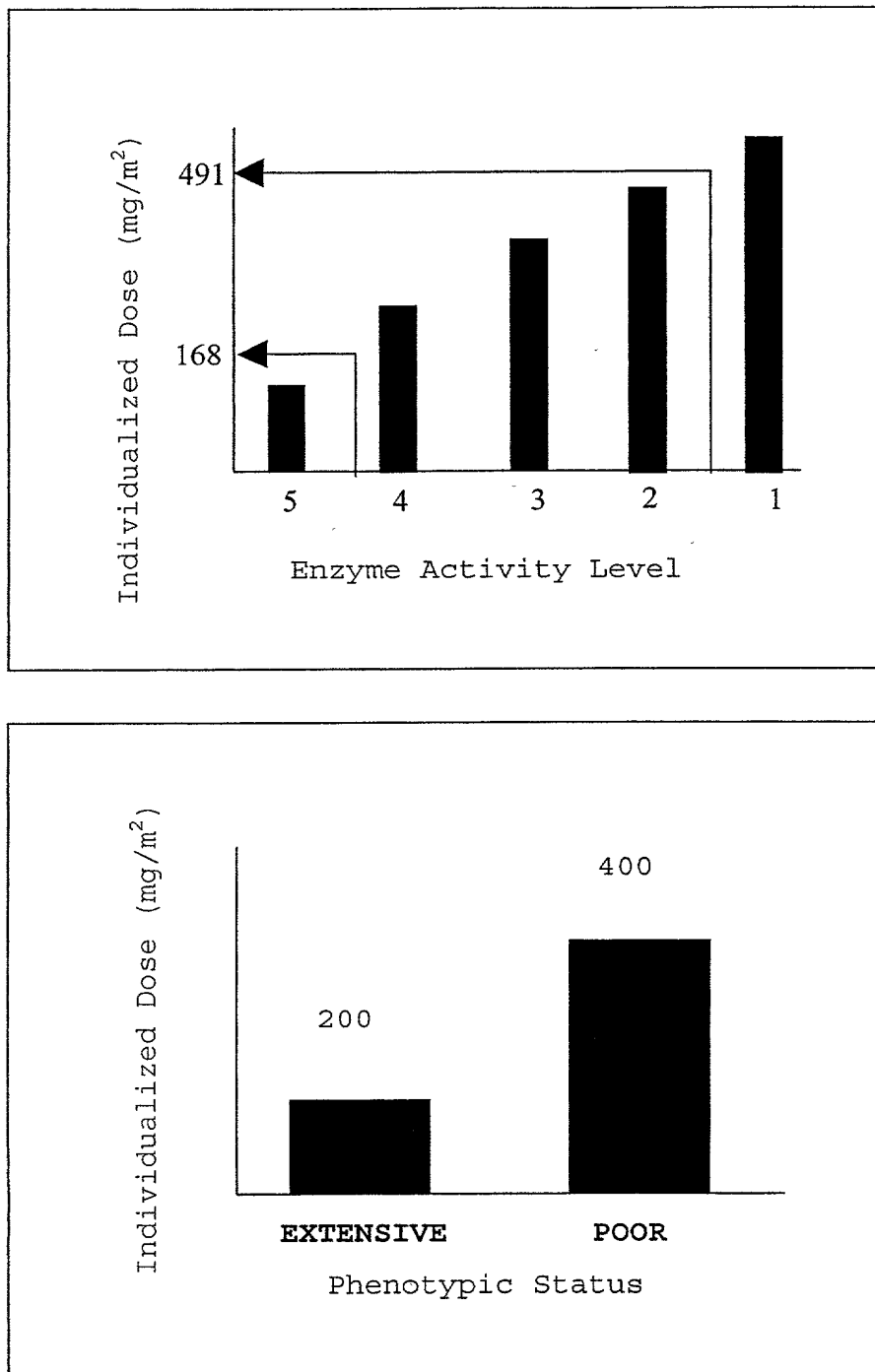


Fig. 29